WHAT IS CLAIMED IS:

 A method for indicating quality of a radio frame transmitted over a wireless link, comprising:

receiving a radio frame from a wireless link;

determining for the radio frame a power indicator, the power indicator based on a power control trend of the wireless link; and

generating a quality indicator for the radio frame based upon the power indicator.

10

DOGDERAC DZIMOI

- 2. The method of Claim 1, wherein the power control trend comprises a slope of power control commands for the link.
- 3. The method of Claim 1, wherein the power control trend comprises a slope of power control commands for the link and at least one other link participating in a soft handoff with the link.

4. A method for indicating quality of a radio frame transmitted over a wireless link, comprising:

receiving a radio frame from a wireless link;

determining for the radio frame a bit energy 5 indicator, the bit energy indicator based on a bit energy to interference ratio; and

generating a quality indicator for the radio frame based upon the bit energy indicator.

- 5. A method for indicating quality of a radio frame transmitted over a wireless link, comprising: receiving a radio frame from a wireless link; and
- determining a quality indicator for the frame based upon a plurality of link parameters.
 - 6. The method of Claim 5, wherein the link parameters comprise:
- a bit energy indicator, the bit energy indicator 10 based on a bit energy to interference ratio; and
 - a power indicator, the power indicator based on a power control trend of the wireless link;
- 7. The method of Claim 5, wherein the link 15 parameters are weighed unequally in determining the quality indicator.

8. A system for indicating quality of a radio frame transmitted over a wireless link, comprising:

means for receiving a radio frame from a wireless link:

means for determining for the radio frame a power indicator, the power indicator based on a power control trend of the wireless link; and

means for generating a quality indicator for the radio frame based upon the power indicator.

- 9. The system of Claim 7, wherein the power control trend comprises a slope of power control commands for the link.
- 15 10. The system of Claim 7, wherein the power control trend comprises a slope of power control commands for the link and at least one other link participating in a soft handoff with the link.

TONICO " CONTOCON

11. A system for indicating quality of a radio frame transmitted over a wireless link, comprising:

means for receiving a radio frame from a wireless link;

means for determining for the radio frame a bit energy indicator, the bit energy indicator based on a bit energy to interference ratio; and

means for generating a quality indicator for the radio frame based upon the bit energy indicator.

15

- $$12.\ A$$ system for indicating quality of a radio frame transmitted over a wireless link, comprising:
- means for receiving a radio frame from a wireless link; and
- 5 means for determining a quality indicator for the frame based upon a plurality of link parameters
 - 13. The system of Claim 12, wherein the link parameters comprise:
 - a bit energy indicator, the bit energy indicator based on a bit energy to interference ratio; and
 - a power indicator, the power indicator based on a power control trend of the wireless link.
 - 14. The method of Claim 12, wherein the link parameters are weighed unequally in determining the quality indicator.

TOSESO, CONTROL

- 15. A propagated signal, comprising:
- a transmission medium; and
- a quality indicator for a radio frame in soft handoff transmitting on the medium, the quality indicator generated based upon at least:
 - a bit energy indicator, the bit energy indicator based on a bit energy to interference ratio; and
- $$\rm a$$ power indicator, the power indicator based on $$\rm 10$$ a power control trend of the wireless link.

26

16. A method for soft handoff, comprising: receiving over a each of a plurality of soft handoff links a radio frame;

for each radio frame determining a quality indicator, the quality indicator generated based upon at least:

a bit energy indicator, the bit energy indicator based on a bit energy to interference ratio;

a power indicator, the power indicator based on a power control trend of the wireless link;

forwarding the frame and quality indicator to a base station controller; and

 $$\operatorname{selecting}$ one of the frames based on the quality 15 indicator.

1.0

15

20

27

17. A method for soft handoff, comprising:

at each transceiver in communication with one of a plurality of soft handoff links for a connection:

receiving a redundant radio frame;

temporarily holding the redundant radio frame;

determining a quality indicator for the redundant radio frame;

transmitting to a frame selector the quality indicator;

selecting at the frame selector one of the redundant frames as a selected frame, such selection based upon the quality indicator received from each transceiver;

requesting the selected frame from the transceiver holding the selected frame;

forwarding the selected frame for transmitting in the connection.

18. The method of Claim 18, further comprising discarding the redundant radio frames that are not the selected frame.

DOGINARO DZISTI

5

10

19. A system for indicating quality of a radio frame transmitted over a wireless link comprising logic encoded in media, the logic operable to:

receive a radio frame from a wireless link;

determine for the radio frame a power indicator, the power indicator based on a power control trend of the wireless link; and

generate a quality indicator for the radio frame based upon the power indicator.

29

20. A system for indicating quality of a radio frame transmitted over a wireless link comprising logic encoded in media, the logic operable to:

receiving a radio frame from a wireless link; and determining a quality indicator for the frame based upon a plurality of link parameters.